

SELECTION OF SEED CORN.

With Proper Seed Selection, Value of Corn Crop in North Carolina Alone Could be Increased \$3,250,000 Yearly—How it May be Done.

Messrs. Editors:—As the time is now drawing nigh for the selection of seed corn for next year's planting, a few suggestions as to the proper place to select, and characteristics of the ear and stalk to have in mind in the selection, may not be out of place. If by careful seed selection, the yield for North Carolina can be increased two bushels of shelled corn per acre, it will mean about three and one-fourth million dollars clear to the farmers of North Carolina when corn is selling for sixty cents per bushel. This is an exceedingly low estimate of what can be done by proper seed selection, for workers in other States have found that from five to fifteen bushels of shelled corn more are yielded per acre from well selected seed than from those selected in the usual way. In our experimental work with this cereal on the Edgecombe Test Farm, which has been running some four to five years, we have found that varieties of corn that were planted side by side in the same way on the same type of land and fertilized and cultivated identically, as far as was possible to do, differed as much in yield as 14.7 bushels of shelled corn per acre.

PLACE TO SELECT SEED CORN

The proper place to select seed corn is in the field at or just before gathering time and select from stalks that have more than one good developed ear per stalk, as this will tend to an increased yield in the next year's crop. It has been demonstrated time and again that stalks that bear two medium sized ears per stalk will yield more shelled corn per stalk than those that produce only one large ear per stalk, and hence more bushels of corn per acre. The selection should not be turned over to the hired man, but should be given the best efforts of the farmer himself, as it is sure that time expended in this work will prove as profitable, if not more so, than any other work done on the farm. By continually selecting and planting corn possessing certain desirable characteristics, such as production of two good ears per stalk, it will be found as the selection goes on from year to year that these desirable qualities have each year become more thoroughly fixed.

It must be constantly kept in mind that on every farm changes beneficial or detrimental are constantly taking place, as it is an inherent tendency of all plants to vary more or less and retrograde or "revert" to a less productive state if intelligent and rigid selection is not continually kept up.

In making selections in the field,



A

B

C

Fig. 1.

Poor and well shaped ears, (a) too great distance between grain rows and poorly filled at tip and butt; (b) too small ear; (c) well shaped ear.

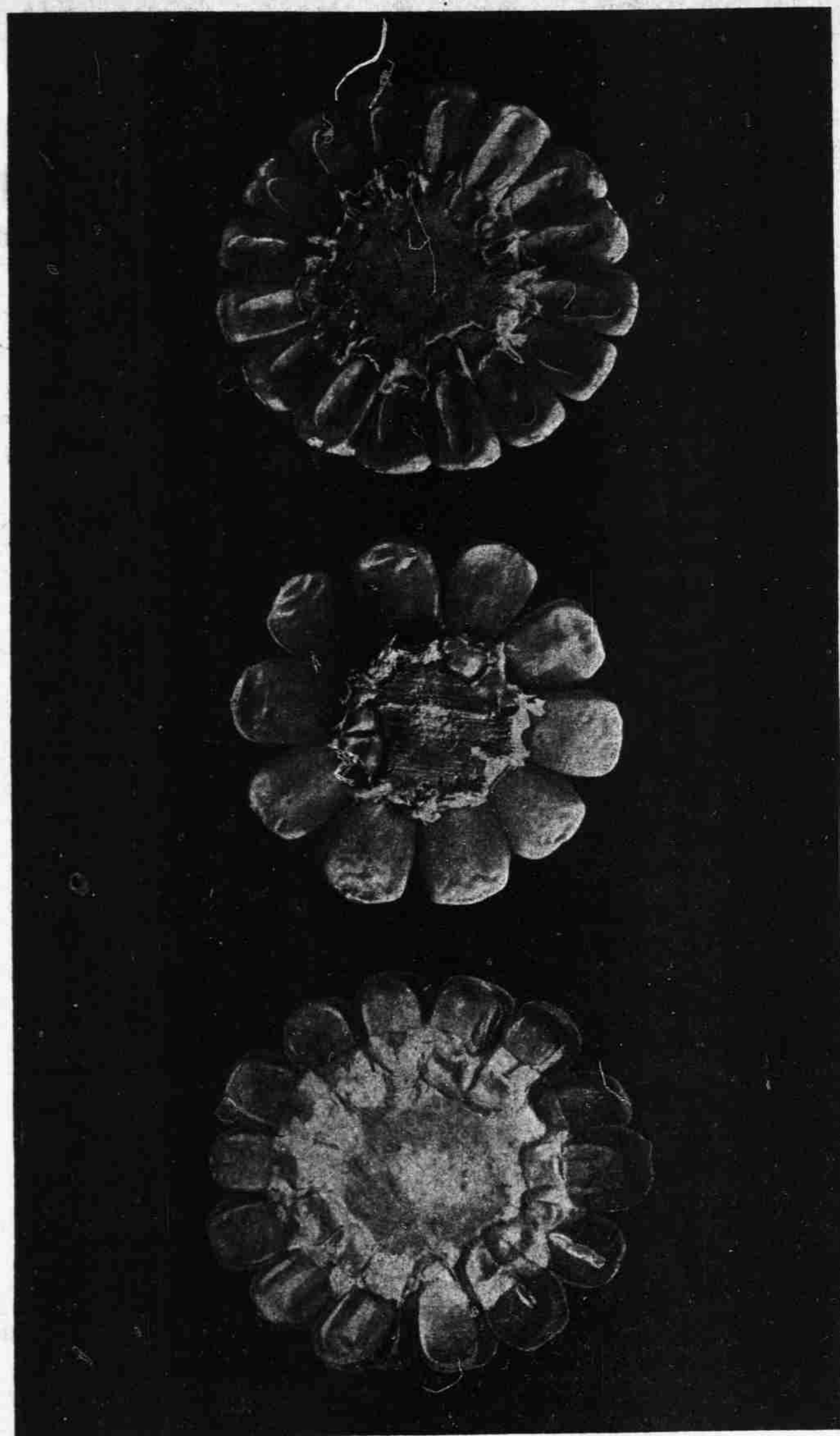


Fig. 2.

Types of cobs: (a) good type; (b) too small cob and distance between rows of kernels too wide; (c) too large cob and kernels too round and shallow.

at least four times as much corn should be gathered as it is desired for seed the following year, so that further and more careful selection can be made, after the ears have been taken to the barn, when a leisure time presents itself. In the final selection, the ears should be arranged conveniently on the barn floor or ground, and with an ear of the type desired in mind, or in hand, go over the lot and remove all undesirable ears. The seed thus selected should be transferred to a box or barrel and covered with wire gauze or something else that will afford thorough ventilation and keep out rats and mice. Store the barrel or box in some dry place and allow to remain until the seed are wanted for planting.

BARN SELECTION.

It is a common and almost universal practice in North Carolina to make seed corn selection, where it is made at all, from the crib in the spring just before planting time, when the quantity is small and the quality inferior. This method yields better results than no selection at all, but far inferior to field

selection, where the performance record of each stalk can be taken into consideration.

In barn selection it is usually the larger ears that are chosen for seed purposes. Such ears were, as a general rule, produced on stalks that bore but one ear per stalk, or else on stalks that grew in the richest spots of the field. Neither of these types of ears are the best suited for such purposes. We have in this State, by our method (barn) of seed corn selection, been unconsciously selecting and growing one-eared varieties of corn.

Other things being equal, selection in the field should be made from those stalks that contain the largest amount of shelled corn per stalk. The stalk should possess a tolerably large circumference at the base and gradually taper towards the top, as this is the type that stands drought best and is less apt to be blown down. It should be of a medium height and have a good leaf and root development. Selections should only be made from perfectly healthy plants.

The ears should be selected from